

USSN 10/073644 (MXI-211)
Proposed Amended Claims

52-58. (Canceled)

59. (Allowed/Amended) An isolated human monoclonal antibody, or antigen binding portion thereof, selected from the group consisting of:

(a) an antibody, or antigen binding portion thereof, comprising (i) a heavy chain variable region comprising CDR1, CDR2, and CDR3 sequences comprising amino acid residues 30-35, amino acid residues 50-66, and amino acid residues 99-108 of SEQ ID NO:2, respectively; and (ii) a light chain variable region comprising CDR1, CDR2, and CDR3 sequences comprising amino acid residues 24-34, amino acid residues 50-56, and amino acid residues of 89-97 of SEQ ID NO:4, respectively, wherein the antibody binds to human CD89; and

(b) an antibody, or antigen binding portion thereof, comprising (i) a heavy chain variable region comprising CDR1, CDR2, and CDR3 sequences comprising amino acid residues 31-35, amino acid residues 50-66, and amino acid residues 99-108 of SEQ ID NO:6, respectively; and (ii) a light chain variable region comprising CDR1, CDR2, and CDR3 sequences comprising amino acid residues 24-35, amino acid residues 51-57, and amino acid residues 90-99 of SEQ ID NO:8, respectively, wherein the antibody binds to human CD89.

60. (Amended) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising a human heavy chain variable region and a human light chain variable region, wherein:

- (a) the human heavy chain variable region comprises an amino acid sequence that is at least 90% homologous identical over the entire length of to the amino acid sequence of SEQ ID NO:2;
- (b) the human light chain variable region comprises an amino acid sequence that is at least 90% homologous identical over the entire length of to the amino acid sequence of SEQ ID NO:4;
- (c) the antibody binds to human CD89;
- (d) the antibody does not activate complement upon binding to CD89 *in vivo*; and
- (e) the antibody does not block IgA binding to CD89.

61. (Amended) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising a human heavy chain variable region and a human light chain variable region, wherein:

- (a) the human heavy chain variable region comprises an amino acid sequence that is at least 90% homologous identical over the entire length of to the amino acid sequence of SEQ ID NO:6;
- (b) the human light chain variable region comprises an amino acid sequence that is at least 90% homologous identical over the entire length of to the amino acid sequence of SEQ ID NO:8;
- (c) the antibody binds to human CD89;
- (d) the antibody does not activate complement upon binding to CD89 *in vivo*; and
- (e) the antibody does not block IgA binding to CD89.

62. (Allowed) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising human heavy chain and human light chain variable regions comprising the amino acid sequences shown in SEQ ID NO:2 and SEQ ID NO:4, respectively.

63. (Allowed) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising human heavy chain and human light chain variable regions comprising the amino acid sequences shown in SEQ ID NO:6 and SEQ ID NO:8, respectively.

64. (Amended) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising:

- (a) a heavy chain variable region derived from a human germline V_H 3-30.3 gene (SEQ ID NO:8) [NOTE: GERMLINE SEQUENCES TO BE ADDED TO THE SEQUENCE LISTING]; and
- (b) a light chain variable region derived from a human germline V_K L18 (SEQ ID NO:9) or V_K A27 (SEQ ID NO:10) gene;
wherein the human antibody binds human CD89.

65. (Amended) The antibody, or antigen binding portion thereof, of claim 64, wherein the light chain variable region is derived from a human germline V_K L18 gene (SEQ ID NO:9).

66. (Amended) The antibody, or antigen binding portion thereof, of claim 64, wherein the light chain variable region is derived from a human germline V_K A27 gene (SEQ ID NO:10).

67. (Amended) The antibody, or antigen binding portion thereof, of claim 59, 60 or 61 †, wherein the antibody is a Fab fragment or a single chain antibody. [WE CAN REMOVE MULTIPLE DEPENDENCIES BEFORE FILING]

68. (Amended) A hybridoma comprising a B cell obtained from a transgenic nonhuman animal having a genome comprising a human heavy chain transgene and a light chain transgene fused to an immortalized cell, wherein the hybridoma produces a detectable amount of the antibody, or antigen binding portion thereof, of claim 59, 60, or 61 †.

69. (Amended) A transfectoma comprising nucleic acids encoding a human heavy chain and a human light chain, wherein the transfectoma produces a detectable amount of the antibody, or antigen binding portion thereof, of claim 59, 60, or 61 †.

70. (Canceled)

71. (Amended) A method of producing the antibody, or antigen binding portion thereof, of claim 59, 60, or 61 †, comprising:

- immunizing a transgenic nonhuman animal having a genome comprising a human heavy chain transgene and a human light chain transgene with human CD89 or a cell expressing human CD89, such that antibodies are produced by B cells of the animal;
- isolating B cells of the animal;
- fusing the B cells with myeloma cells to form immortal, hybridoma cells that secrete human monoclonal antibodies specific for CD89; and
- isolating the human monoclonal antibodies specific for CD89 from the culture supernatant of the hybridoma.

72 - 84. (Cancelled)

85. (Amended) A composition comprising the antibody, or antigen binding portion thereof, of claim 59, 60, or 61 + and a pharmaceutically acceptable carrier.

86 and 87. (Cancelled)

88. (Amended) A composition comprising a combination of two or more antibodies, or antigen binding portions thereof, of claim 59, 60, or 61 +, wherein each of said antibodies, or antigen binding portions thereof, binds to a distinct epitope of human CD89.

89. The composition of claim 85 further comprising a cytotoxic agent.

90. (Cancelled)

91. (Amended) A method of inhibiting growth of a cell comprising contacting the cell with an effective amount of the antibody, or antigen binding portion thereof, of claim 59, 60, or 61, bispecific or multispecific molecule of claim 72 such that growth of the cell is inhibited, wherein the bispecific or multispecific molecule includes a portion which binds to an antigen on the cell.

92- 96. (Cancelled)

97. (Amended) A method of treating or preventing a disease characterized by precipitation of IgA-immune complexes, comprising administering to a subject in need of treatment the an isolated human monoclonal antibody, or antigen binding portion thereof, of claim 59, 60, or 61 that specifically binds to CD89 in an amount effective to treat or prevent the disease, wherein the monoclonal antibody, or antigen binding portion thereof, does not block blocks IgA binding to CD89.

98. The method of claim 97, wherein the disease characterized by precipitation of IgA-immune complexes is selected from the group consisting of chronic hepatitis, Henoch-Schonlein purpura (HSP), Berger's disease, and IgA-glomerulonephritis.

99. (Amended) A method of detecting the presence of CD89 or a cell expressing CD89 in a sample, comprising:

contacting the sample with the antibody, or antigen binding portion thereof, of claim 59, 60, or 61 + under conditions that allow for formation of a complex between the antibody, or antigen binding portion thereof, and CD89; and
detecting the formation of the complex.

100. (Cancelled)